



State of Utah

Department of
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

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Lieutenant Governor

DAQE-IN0009102-04

July 26, 2004

Rodney Smith
ATK Thiokol Propulsion
MS 301
PO Box 707
Brigham City, Utah 84302-707

Dear Mr. Smith:

Re: Intent to Approve: North Plant Operations (Group-1 and Group-2, DAQE- AN0009098-03
Abrasive Blast Cabinet, Promontory Plant, Box Elder County, CDS A, ATT, HAPs, Title V
Major. Project Code: N0009-102

The attached document is the Intent to Approve (ITA) for the above-referenced project. ITAs are subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Nando Meli. He may be reached at (801) 536-4052.

Sincerely,

Rusty Ruby, Manager
New Source Review Section

RR:NM:jc

cc: Bear River Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: NORTH PLANT OPERATIONS
(GROUP-1 AND GROUP-2, DAQE-AN0009098-03) ABRASIVE
BLAST CABINET, PROMONTORY PLANT**

**Prepared By: Nando Meli, Engineer
(801) 536-4052
Email: nmeli@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0009102-04

Date: July 26, 2004

ATK Thiokol Propulsion

**Source Contact
Rodney Smith
(435) 863-5754**

**Richard W. Sprott
Executive Secretary
Utah Air Quality Board**

Abstract

ATK Thiokol Propulsion – Promontory, operates a rocket motor manufacturing plant, located 28 miles west of Brigham City, on US Highway 83, Box Elder County. This modification involves ATK Thiokol, installing an abrasive blast cabinet in Building E-517. The glove-box type unit will be used to clean small hardware and parts. Box Elder County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Available Control Technology (MACT) regulations apply to this source but not to this modification. Title V of the 1990 Clean Air Act applies to this source. There will be a 0.72 tons per year increase in PM₁₀ emissions. The changes in emissions will result in the following, in tons per year, potential to emit totals: PM₁₀ = 41.72, VOC = 30.00, HAPs = 15.00.

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-4. A notice of intent to approve will be published in the Box Elder News & Journal on August 4, 2004. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-4. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This Approval Order (AO) applies to the following company:

Site Office

Site Office

ATK Thiokol Inc. - Promontory

US Hwy 83

28 miles west of Brigham City, UT

Corporate Office Location

Corporate Office Location

ATK Thiokol Corporation

P.O. Box 689 M/S 300

Brigham City, UT 84302-0689

Phone Number (435) 863-5928

Fax Number (435) 863-4037

The equipment listed in this AO shall be operated at the following location:

North Plant Operations (Groups 1 & 2)

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27
4,619,580 meters Northing, 381,270 meters Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. All records referenced in this which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the five-year period prior to the date of the request.
5. ASTK Thiokol shall install and operate the abrasive blast cabinet in Building E-517 and shall conduct its operations of the North Plant Operations in accordance with the terms and conditions of this AO, which was written pursuant to ATK Thiokol's Notice of Intent submitted to the Division of Air Quality (DAQ) on June 15, 2004, and additional information submitted to the DAQ on June 30, 2004, and July 1, 2004. The approved installations shall consist of the emissions facilities listed in Table 1, which is under Condition #8. The conditions in this AO that are applicable to individual emissions units shall apply to each of the facilities listed in Table 1 unless indicated otherwise. In addition to the equipment listed in Table 1, ATK Thiokol shall also operate uncontrolled VOC, TCA and/or HAP emission facilities of the following types: ovens, exhaust vents, fume hoods, vacuum pumps, fuel dispensing equipment, hydroclaves, and autoclaves. These uncontrolled VOC, TCA and/or HAP emission facilities may be added, as needed, provided the emission total from all units does not exceed the emission limitations contained in this AO.
6. If ATK Thiokol plans to construct new emissions facilities, other than the uncontrolled VOC, HAPs, and/or TCA emissions facilities of the types described in Condition #5, in North Plant Operations in the future, ATK Thiokol shall submit to the Executive Secretary an NOI and receive an AO prior to initiation of construction. Such new emissions facilities may be appended to the list of emissions units in Table 1 (Condition #8) of this AO. For new emissions facilities, the Executive Secretary shall be notified in writing upon start-up of the installation, as an initial compliance inspection is required.
7. This AO shall replace the AO (DAQE-AN009098-03) dated November 19, 2003.
8. The approved installations shall consist of the following equipment or equivalent*:

Table 1:

Group 1 & 2 Equipment List	
Unit ID	Description
E-512-DC01	Shim Room Grit Blast (Empire Abrasive Equipment Corp Model DCM 450)
E-512-DC02	VTL Dust Collector (Spencer Model 40x40)
E-512-DC03	Soda Blast Dust Collector (US Filter Surface Preparation Model 3JPSC9)

E-512-PB01	Paint Spray Booth
E-512-PB02	Paint Spray Booth (Bleeker Bros. Model #PF-6-7-6)
E-516-PB01	Paint Spray Booth
E-517-DC01	Downflo Cartridge Dust Collector (Torit Model DFT 3-24)
E-517-DC02	Cyclone + Baghouse Dust Collector
E-517-DC03	Cyclone Dust Collector
E-517-DC04	Abrasive Blast Cabinet
E-517C-PB01	Paint Booth
E-517-WS01	Wet Scrubber
E-529-PB01	Paint Spray Booth
M-392-DC01	Carpenter Shop Dust Collector**
M-508-CD01	Brulin 815 GD Degreaser
M-508-DC01	Dust Collector (Spencer Model 40x75)
M-508-DC02	Dust Collector (Hoffman Model GS-33288)
M-508-DC03	Dust Collector (Ecolair Model 625-3)
M-508-DC04	Grit Blast Dust Collector (TWW Sly Manuf. 68360)
M-508-DC05	Dust Collector (MickroPul Corp. 495-10-20)
M-508-PB01	Large Teflon Booth
M-508-PB02	Vertical Teflon Booth
M-508-PB03	Paint Booth (Bleeker Bros. Model SPF-8-8-9)
M-512-DC01	Aluminum Powder Dust Collection System
M-606-DC01	AP Vacuum System Dust Collector (H-7)
M-606-DC02	AP Feed Dust Collector (H-8, 10 ACM)
M-606-DC03	AP Feed Dust Collector (H-9, Bud Mill)
M-606-DC04	AP Feed Dust Collector (H-6)
M-702-DC01	Baghouse/Dust Collector with HEPA bank

* Equivalency shall be determined by the Executive Secretary.

** This equipment is listed for informational purposes only. There are no emissions to the atmosphere from this equipment.

9. ATK Thiokol shall notify the Executive Secretary in writing when the installation of the blast cabinet, E-517-DC04, listed in Condition #8 has been completed and is operational,

as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If installation has not been completed within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous installation of the operation and may revoke the AO in accordance with R307-401-11.

Limitations and Tests Procedures

10. Visible emissions from any point or fugitive emission source associated with North Plant Operations (Group-1 and Group-2) shall not exceed 10% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9.

Visible emissions from the baghouses/dust collectors listed in Table 2 (below) shall be monitored as follows:

- A. A visual opacity survey of each baghouse/dust collector shall be performed at the frequency specified in Table 2 (below) by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. Surveys shall be conducted while baghouses/dust collectors are in operation.
- B. If visible emissions other than steam are observed from a baghouse/dust collector, an opacity determination shall be performed on that emissions unit by a certified observer within 24 hours of the initial survey. Opacity determinations shall be conducted while baghouses/dust collectors are in operation.
- C. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.
- D. For visual opacity surveys conducted under 10.A., a log of monitoring results shall be maintained including: dates and times of surveys; identification of each dust collector being surveyed; and whether or not visible emissions were observed

For each opacity determination conducted under 10.B., all data required by 40 CFR 60, Appendix A, Method 9 shall be recorded.

Table 2:

Unit ID	Monitoring Frequency
E-512-DC01	three-months
E-512-DC02	three-months
E-512-DC03	three-months
E-517-DC01	weekly

E-517-DC02	weekly
M-508-DC01	weekly
M-508-DC02	weekly
M-508-DC03	daily, four times per week if operating
M-508-DC04	daily, four times per week if operating
M-508-DC05	three-months
M-512-DC01	three-months
M-606-DC01	three-months
M-606-DC02	three-months
M-606-DC03	three-months
M-606-DC04	three-months

11. For M-702-DC01, ATK Thiokol Propulsion shall inspect the HEPA filter banks every six months to verify that there are no holes or tears in the filter media and that the filters are installed correctly. A log of monitoring results shall be maintained including: dates and times of surveys; and identification of the HEPA bank being surveyed.

Group-1

12. Group #1 designated buildings are the following:

E-501	E-517	E-520	E-532	E-543
E-506	E-517C	E-520A	E-533	M-508
E-510	E-519	E-520B	E-535	M-575
E-512	E-519C	E-521	E-536	M-711
E-515	E-519D	E-522	E-537	M-719
E-515A	E-519E	E-523	E-538	E-516
E-519H	E-529	E-539		

13. Paint spray booths in Group-1 shall be equipped with filters to capture particulate emissions. Any filters with holes or other defects shall be immediately replaced. All air emissions exiting the booths shall pass through the required control system before being vented to the atmosphere.

Group-2

14. Group 2 designated buildings are the following:

M-191A	M-191B	M-192	M-193A	M-193B
M-326	M-327	M-336	M-336A	M-338
M-340A	M-345	M-348	M-366	M-381
M-381A	M-382	M-570	M-570A	M-574

M-580	M-581	M-583	M-586	M-590A
M-590B	M-591A	M-591B	M-591C	M-597B
M-600A	M-628B	M-643	M-643B	M-689A
M-696	M-697	M-698	M-701	S-503
S-546	S-547	S-549	S-551	S-554
S-555	S-556	S-560	S-561	S-562
S-563	S-564	S-565	S-566	S-567
S-568	S-569	S-570	S-571	S-572
S-573	S-574	S-575	S-576	S-577
S-578	S-579	S-580	S-581	S-604
S-605	S-606	S-607	S-608	S-611
S-612	S-613	S-614	S-615	S-616
S-617	S-628	S-631	S-632	S-633
S-635	E-543			
M-136 Area	M-186 Area	M-191	M-193	M-199
M-321	M-321A	M-340	M-392	M-504
M-512	M-514	M-515	M-516	M-519
M-521	M-523	M-524	M-526	M-528
M-571	M-572	M-573	M-589	
M-591	M-593	M-594	M-595	M-596
M-597	M-598	M-599	M-600	M-601
M-602	M-603	M-604	M-605	M-606
M-621	M-622	M-623	M-627	M-628
M-629	M-636	M-638	M-639	M-640
M-641	M-642	M-689	M-693	M-694
M-700	M-702	S-501	S-502	S-550

North Plant Operations (Group-1 and Group-2)

15. The emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAPs) from all operations located in Groups 1 & 2 designated buildings shall not exceed:

30.0 tons VOC per rolling 12-month period

15.0 tons of HAPs (including TCA) per rolling 12-month period

Compliance with the limitations shall be determined on a rolling 12-month total. Based on the first day of each month a new 12-month total shall be calculated using data from the previous 12 months. The emissions of VOC and HAPs shall be determined by maintaining a record of such items containing materials purchased or used each month. The record shall include the following data for each item purchased/used:

- A. Names of the VOC or HAPs emitting materials, such as; paint, adhesive, solvent, thinner, reducers, chemical compound, etc.
- B. Weight and use location of the material in pounds per gallon. The building to which the material was delivered/issued may be considered as use location.
- C. Percent by weight of all VOC, HAPs, etc., for each individual material used. The recommended source of the information is from the manufacturers Material Safety

Data Sheets (MSDS). Owner/operator shall obtain MSDS data from manufacturer and retain information on-site.

- D. The amount of VOC, HAPs, etc., used on a daily basis and summed for Group1 and Group-2 operations. If deliveries are used for determining consumption, then the date of delivery may be considered the use date.
- E. The amount of VOC and HAPs contained in each individual item or surface coating used shall be calculated by the following procedure:

$$\text{VOC or HAP} = (\% \text{VOC or HAP by Weight} / 100) * (\text{Density lb/gal}) * (\text{Gallons Consumed}) / (2,000 \text{ lb/ton}).$$
- F. The amount of VOC and HAPs reclaimed/disposed for the month shall be similarly quantified and subtracted from the quantities calculated above, to provide the monthly total VOC and HAPs emissions.
- G. The cumulative total of the rolling 12 months of VOC, TCA and HAPs emissions shall not exceed the amount specified above.
- H. Records of consumption shall be kept for all periods when the plant is in operation. Records of consumption shall be made available to the Executive Secretary upon request, and shall include a period of two years ending with the date of the request.

- 16. For North Plant Operations (Group-1 and Group-2), solvents and solvent containing materials shall be stored in closed containers to prevent evaporation into the atmosphere.

Records & Miscellaneous

- 17. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded.
- 18. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
- 19. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emission estimations below include point source, fugitive emissions, grandfathered emissions, and do not include fugitive dust, road dust, or tail pipe emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for ATK Thiokol Propulsion – Promontory – North Plant Group 1& 2 activities are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	41.72
B.	VOC	30.00
C.	Total HAPs	15.00

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Rusty Ruby, Manager
New Source Review Section